Reduced energy intake was the main contributing factor to weight loss maintenance three years after gastric bypass

Kjelstrup, Louise Süheyla; Kulseng, B.; Mostad, I.L.; Strømmen, M.; Andersen, Jens Rikardt

Published in:
Clinical Nutrition Supplements

Publication date:
2010

Document version
Publisher's PDF, also known as Version of record

Volume 5 Supplement 2 2010

ISSN 1744-1161

ELSEVIER

Clinical Nutrition Supplements

An International Journal Devoted to Clinical Nutrition and Metabolism

Abstracts of the 32nd ESPEN Congress Nice, France, 5 – 8 September 2010

Official journal of the European Society for Clinical Nutrition and Metabolism

PP179

PREVALENCE OF OVERWEIGHT AND OBESITY IN CHILDREN AND ADOLESCENTS AND FREQUENCY OF INTERVENTIONS BY PHYSICIANS IN A TERTIARY GENERAL HOSPITAL IN ARGENTINA

D.R. Setton[1], P. Otero[1], A.P. Duran[1], V. Rosana[1], N. Granados[1], R. Lambert[1], J.G. Llera[1]. [1]*Pediatria, Hospital Italiano de Buenos Aires, Buenos Aires, Argentina*

Rationale: Estimate prevalence of obesity in a pediatric population in contrast to frequency of actions by physicians related to its recognition or management

Materials and Methods: Retrospective, cross-sectional, descriptive and analytic study, included all patients 2–19 years with at least 1 visit in 2007–8. We obtained weight and length/height from our Electronic Health Record (EHR).Overweight, obesity and severe obesity were defined by WHO BMI references. We estimated the frequency of referral to nutrition specialist, and laboratory results (glycemia, HDL cholesterol, LDL cholesterol) registered.

Results: 14743 selected patients, 22.1% were overweight and 12.4% were obese Prevalence of overweight and obesity was lower in adolescents. Prevalence of overweight and obesity is >25% in the 3 groups and is >40% in school-age children. The more obese patients (BMI Z $\geqslant$ 3) were 3.7% in preschoolers, 3.3% in children and 0.7% in adolescents.

3.3% and 1.1% of the patients had the diagnosis overweight and obesity registered in the EHR. Frequency of overweight and obesity as diagnosis registered in the EHR increased with BMI. Only 11.5% of overweight or obese patients had diagnoses registered. Almost 90% of the patients with overweight and obesity are subregistered (x^2 1305, $p < 0.001$; x^2 976, $p < 0.001$ respectively). The referral to a nutrition specialist and the frequency of laboratory tests was low. This frequency range was 11.8–52.5% based on BMI categories. >80% of patients with diagnosis registered in EHR were referred to a specialist. HDL, LDL and glycemia were higher ordered in the group with diagnosis of obesity.

Conclusion: Prevalence of overweight and obesity is high in our population and recognition by pediatricians is low. Recognition of obese patients is essential to avoid under or overnutrition and optimize nutritional care and metabolic support.

Disclosure of Interest: None declared

PP180

REDUCED ENERGY INTAKE WAS THE MAIN CONTRIBUTING FACTOR TO WEIGHT LOSS MAINTENANCE THREE YEARS AFTER GASTRIC BYPASS

L.S. Kjelstrup[1,2], B. Kulseng[3], I.L. Mostad[2], M. Strømmen[3], J.R. Andersen[1,4]. [1]*Dept Human Nutrition, University of Copenhagen, Copenhagen, Denmark;* [2]*Division of Clinical Nutrition,* [3]*Centre for Obesity, Dept Surgery, St Olav University Hospital, Trondheim, Norway;* [4]*Nutrition unit 5711, Rigshospitalet, Copenhagen OE, Denmark*

Rationale: Gastric bypass is effective in inducing weight loss, but the long-time effects are poorly documented. The aim of the study was to evaluate factors contributing to weight loss and weight maintenance in subjects with morbid obesity 3 yr after Laparoscopic Roux-En-Y gastric bypass surgery (n = 17) compared with a lifestyle modification program (n = 20) and Pre-surgery (n = 14), in a case-control study design.

Methods: Body composition (DXA scanning) was measured at baseline and after 3 yr. Prospective food intake (7 days pre coded food diary), energy expenditure (indirect calorimetry) and physical activity (7 days recall questionnaire) were measured after 3 yr. Fat uptake ($^{13}CO_2$ triolein breath test) was compared with pre surgery patients (n = 14). Median (range) are given.

Results: After 3 yr weight loss was 32 (−14, −76) kg in the operated compared with 5 (+9, −23) kg in lifestyle group ($P < 0.001$). Fat mass differences were −24 (−9, −62) kg vs. −6 (+0.08, −19) kg ($P < 0.001$). Fat free mass decreased in the surgery group −8 (−0.3, −24) kg, but not in the lifestyle group +2 (+14, −7) kg ($P < 0.001$). Total energy intake was 1608 (1135, 2555) kcal/d compared with 2219 (1488, 3747) kcal/d ($P < 0.001$). Energy intake from fat, carbohydrate and protein did not differ. Resting energy expenditure was lower in the operated group 1635 (1500, 2030) kcal/d vs.1930 (1450, 2750) kcal/d ($P = 0.005$). Physical activity level did not differ. The $^{13}CO2$ peak expiration was 0.359 (0.244, 0.518) μmol/min in the surgery compared with 0.347 (0.153, 0.466) μmol/min in the Pre surgery group ($P = 0.905$), indicating gastric bypass operation did not lead to fat malabsorption.

Conclusion: Laparoscopic Roux-en-Y gastric bypass operation induced a larger weight loss than lifestyle intervention, and maintained it 3 yr post intervention. A lower energy intake was the main contributor, and trunkal fat contributed most.

Disclosure of Interest: None declared

PP181

Outstanding abstract

METABOLIC RISK IN ADOLESCENTS TREATED WITH ATYPICAL ANTIPSYCHOTIC DRUGS

C. Cuerda[1], C. Velasco[1], J. Merchan[2], L. Paron[1], C. Arango[2], I. Bretón[1], M. Camblor[1], P. García-Peris[1]. [1]*Unidad de Nutricion Clinica y Dietetica,* [2]*Division of Adolescent Medicine of Psychistry, Hospital Gregorio Marañon, Madrid, Spain*

Rationale: Atypical antipsychotics (AA) are associated with metabolic side effects that may increase cardiovascular risk and medication non-compliance. Our aims were to study the effects of these drugs on body composition and REE and the prevalence of metabolic syndrome in adolescent patients.

Methods: We studied 46 antipsychotic-naive adolescents (13F/33M), mean age 16.3±1.4 yrs (11–18), in their first psychotic episode. They were treated with olanzapine (n = 12), risperidone (n = 18), quetiapine (n = 16). Mean follow-up was 5.9±4.7 months (1–12). We performed clinical evaluation (anthropometry, tetrapolar bioimpedance (Bodystat 1500), indirect calorimetry (Deltatrac ™ II MBM-200) and biochemistry) at baseline and at the end of treatment. ATP III criteria adapted for adolescents were used to diagnose metabolic syndrome.Values are